

cavity, and the impeller being open radially inwardly for radial communication with the air flow passageways between the heat dissipating elements and at least partially open radially outwardly for the discharge of spent cooling air, the impeller also having a radially extending backplate which defines an inlet opening for the axial flow of cooling air, and a plurality of 20 to 26 rearwardly curved air moving blades forming a part of the impeller and having their leading edges spaced substantially radially outwardly from the backplate inlet opening, the blades serving to effect a right angle turn in air flow direction and to withdraw air radially outwardly through the passageways between the heat dissipating elements and direct the same radially outwardly.

CLAIM 12

An improved centrifugal impeller for use in low profile heat sinks having a multiplicity of small upright spaced apart heat dissipating elements in an array defining a multiplicity of small airflow passageways therebetween with a cavity located centrally therewithin, the impeller being adapted to be disposed adjacent to and about the array of heat dissipating elements and to be driven by electric motor disposed in the central cavity, and the impeller being open radially inwardly for radial communication with the air flow passageways between the heat dissipating elements and at least partially open radially outwardly for the discharge of spent cooling air, the impeller also having a radially extending backplate which defines an inlet opening for the axial flow of cooling air and a plurality of rearwardly curved air moving blades forming a part of the impeller and having their leading edges spaced substantially radially outwardly from the backplate inlet opening, the blades serving to effect a right angle turn in air flow direction and to withdraw air radially outwardly through the passageways between the heat dissipating elements and direct the same radially outwardly, wherein the impeller blades each have an inlet angle in the range of 28° to 40° measured between a line tangent to a